

Mr. Michael Burke
Criterion Catalysts & Technologies, L.P.
1800 East US 12
Michigan City, Indiana 46360-2074

Re: 091-14560
First Administrative Amendment to
Part 70 091-6789-00053

Dear Mr. Burke:

Criterion Catalysts & Technologies, L.P., located at 1800 East US 12, Michigan City, Indiana 46360 was issued a permit on May 1, 2001 for an alumina powder and specialty chemical production. A letter requesting a change in the permit was received on June 19, 2001. The installation of the following control equipment that does not have any pollutant emissions is subject to 326 IAC 2-7-11 which "revises descriptive information where the revision will not trigger a new applicable requirement or violate a permit term". Pursuant to the provisions of 2-7-11 the permit is hereby administratively amended as follows (changes are bolded and deletions are struck-through for emphasis):

- (a) One (1) new Area Dust Collector, identified as ADC #2. This area dust collector will control all fugitive emissions from insignificant activities that exhaust inside the building.
- 1. Section A.3 Specifically Regulated Insignificant Activities of the issued Part 70 permit (T091-6789-00053) is amended to include the new area dust collector and be identified as item (c) of this section. Amendment is as follows:
 - A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

 - (a) Degreasing not exceeding 145 gal/12 months. [326 IAC 8-3-2 and 8-3-5]
 - (b) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors, and electrostatic precipitators including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying, and woodworking operations maintenance. [326 IAC 6-3-2]
 - (c) **One (1) new Area Dust Collector, identified as ADC #2. This area dust collector will control all fugitive emissions from insignificant activities that exhaust inside the building.**
 - 2. To be consistent with the new baghouse identification, Item (I) of Section A.2 baghouse identification is changed to the following:
 - A.2 (I) Bag loadout, screener, and other particulate matter processes equipped with one (1) baghouse, identified as ~~S-DC1 (EX-631-023)~~ **ADC #1** constructed in 1975, and exhausting to stack F.

3. Section D.1 is also revised to incorporate the changes as follows:

Facility Description [326 IAC 2-7-5(15)] (Continued):

- (l) Bag loadout, screener, and other particulate matter processes equipped with one (1) baghouse, identified as ~~S-DC1 (EX-631-023)~~ **ADC #1** constructed in 1975, and exhausting to stack F.
- (m) One (1) natural gas dryer, identified as S-D1 (EX-300-23) constructed in 1965 and exhausting to stack P1.
- (n) One (1) natural gas fired high temperature drier, identified as SEACAP drier (EX-529), constructed in 1996 rated at 1.38 million British thermal units (MMBtu) per hour using a baghouse for particulate control, and exhausting to stack P3.
- (o) One (1) natural gas fired low temperature drier, identified as SD-3 (EX-300-35), constructed in 1965, rated at five (5) million British thermal units (MMBtu) per hour using no controls, and exhausting to stack P2.
- (p) One (1) natural gas fired spray dryer, identified as P-SD (E-110), constructed in 1956 and 1995, with a burner rated at 50 MMBtu/hr, a baghouse and cyclone integral to the process and a scrubber for particulate control, and exhausting to stack B.

Maximum capacities and throughputs for each unit have been included in an OAQ confidential file.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

D.1.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from each of the facilities listed below shall be limited by the following:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

| Unit ID |
|---------------------|
| P-SB1 (T-32) |
| P-SB2 (T-87) |
| P-SILOS* |
| S-DBE (EX-120-005A) |
| S-DBW (EX-120-005B) |
| P-SAR1 (T-33) |
| P-SAR2 (T-128) |

| Unit ID |
|---|
| P-ASR1 (T-30) |
| P-ASR2 (T-129) |
| P-BBL (E-160) |
| P-BL (E-190) |
| S-MIX (EX-120-007A/7B) |
| S-C1 (EX-300-25) |
| S-C2 (EX-130-005) |
| S-PT (EX-104) |
| S-DC1 (EX-631-023) ADC #1 |
| P-SD (E-110) |
| S-D1 (EX-300-23) |
| DCC |
| SEACAP drier |
| SD-3 |

4. Condition D.1.3 is revised to incorporate the new baghouse identification in item (10) of this condition. Change is as follows:

D.1.3 Particulate Matter (PM)

- (a) In order to comply with D.1.1, each baghouse associated with a specific process shall be in operation and control emissions at all times that the specific process is in operation. The specific processes that are equipped with baghouses are:
- (1) thru (9) No changes
 - (10) Bag loadout, screener, and other particulate matter processes identified as ~~S-DC1 (EX-631-023)~~ **ADC #1**
 - (11) One (1) high temperature drier identified as SEACAP drier (EX-529)

All conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5.
If you have any questions on this matter, please contact Aida De Guzman, at (800) 451-6027, press 0
and ask for Aida De Guzman or extension (3-4972), or dial (317) 233-4972.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

APD

cc: File - LaPorte County
U.S. EPA, Region V
LaPorte County Health Department
Northwest Regional Office
Air Compliance Section Inspector - Rick Massoels
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

**Criterion Catalysts and Technologies, L.P.
1800 East US 12
Michigan City, Indiana 46360-2074**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

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|--|--|
| Operation Permit No.: T091-6789-00053 | |
| Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality <i>Original signed by Janet McCabe</i> | Issuance Date: May 1, 2001 Expiration Date: May 1, 2006 |
| First Administrative Amendment No.: 091-14560 | Pages Affected: 6, 7, 30, 31, 32 |
| Issued by: Paul Dubenetzky, Chief Permit Branch Office of Air Quality | Issuance Date: July 26, 2001 |

- (g) One (1) bulk bag loading processes, identified as P-BBL, constructed in 1983, with two baghouses (E-160, E-176) for particulate control, and exhausting to stack BB.
- (h) One (1) bulk loading process containing one rail car loading system, identified as P-BL (E-190) constructed in 1983, and one sealand container loading system, identified as P-BL (E-190) constructed in 1992 and both exhausting to stack CC and equipped with one baghouse for particulate control.
- (i) Two (2) mixers, identified as S-MIX (EX-120-007A and EX-120-007B), constructed in 1975 sharing one baghouse for particulate control, and exhausting to stack Y.
- (j) Two (2) calciners, identified as S-C1 (EX-300-25) constructed in 1965, exhausting to stacks G, H1 and H2 and S-C2 (EX-130-005) constructed in 1975 exhausting to stacks G, O1, O2 and O3, both equipped with one baghouse (EX-631-011) for particulate control.
- (k) One (1) pneumatic transfer process for the fines grinder system, identified as S-PT (EX-104) constructed in 1975, equipped with one baghouse for particulate control, and exhausting to stack J.
- (l) Bag loadout, screener, and other particulate matter processes equipped with one (1) baghouse, identified as ADC #1 constructed in 1975, and exhausting to stack F.
- (m) One (1) natural gas dryer, identified as S-D1 (EX-300-23) constructed in 1965 and exhausting to stack P1.
- (n) One (1) natural gas fired high temperature drier, identified as SEACAP drier (EX-529), constructed in 1996 rated at 1.38 million British thermal units (MMBtu) per hour using a baghouse for particulate control, and exhausting to stack P3.
- (o) One (1) natural gas fired low temperature drier, identified as SD-3 (EX-300-35), constructed in 1965, rated at five (5) million British thermal units (MMBtu) per hour using no controls, and exhausting to stack P2.
- (p) One (1) natural gas fired spray dryer, identified as P-SD (E-110), constructed in 1956 and 1995, with a burner rated at 50 MMBtu/hr, a baghouse and cyclone integral to the process and a scrubber for particulate control, and exhausting to stack B.
- (q) One (1) natural gas fired boiler constructed in 1961, identified as BLR 2 (E-68), constructed in 1961 and exhausting to Stack N.
- (r) One (1) natural gas fired catalyst drier, identified as DCC (drying/calcining/cooling) unit (EX-376), constructed in 1997 rated at ten (10) million British thermal units (MMBtu) per hour using a baghouse for particulate control, and exhausting to stack P4.

Maximum capacities and throughputs not listed in the descriptions above have been included in an OAQ confidential file.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Degreasing not exceeding 145 gal/12 months. [326 IAC 8-3-2 and 8-3-5]
- (b) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors, and electrostatic precipitators including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying, and woodworking operations maintenance. [326 IAC 6-3-2]
- (c) One (1) new Area Dust Collector, identified as ADC #2. This area dust collector will control all fugitive emissions from insignificant activities that exhaust inside the building.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

Facility Description [326 IAC 2-7-5(15)] (Continued):

- (l) Bag loadout, screener, and other particulate matter processes equipped with one (1) baghouse, identified as ADC #1 constructed in 1975, and exhausting to stack F.
- (m) One (1) natural gas dryer, identified as S-D1 (EX-300-23) constructed in 1965 and exhausting to stack P1.
- (n) One (1) natural gas fired high temperature drier, identified as SEACAP drier (EX-529), constructed in 1996 rated at 1.38 million British thermal units (MMBtu) per hour using a baghouse for particulate control, and exhausting to stack P3.
- (o) One (1) natural gas fired low temperature drier, identified as SD-3 (EX-300-35), constructed in 1965, rated at five (5) million British thermal units (MMBtu) per hour using no controls, and exhausting to stack P2.
- (p) One (1) natural gas fired spray dryer, identified as P-SD (E-110), constructed in 1956 and 1995, with a burner rated at 50 MMBtu/hr, a baghouse and cyclone integral to the process and a scrubber for particulate control, and exhausting to stack B.

Maximum capacities and throughputs for each unit have been included in an OAQ confidential file.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from each of the facilities listed below shall be limited by the following:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

| Unit ID |
|---------------------|
| P-SB1 (T-32) |
| P-SB2 (T-87) |
| P-SILOS* |
| S-DBE (EX-120-005A) |
| S-DBW (EX-120-005B) |
| P-SAR1 (T-33) |
| P-SAR2 (T-128) |

| Unit ID |
|------------------------|
| P-ASR1 (T-30) |
| P-ASR2 (T-129) |
| P-BBL (E-160) |
| P-BL (E-190) |
| S-MIX (EX-120-007A/7B) |
| S-C1 (EX-300-25) |
| S-C2 (EX-130-005) |
| S-PT (EX-104) |
| ADC #1 |
| P-SD (E-110) |
| S-D1 (EX-300-23) |
| DCC |
| SEACAP drier |
| SD-3 |

Emission limits for the units listed in this table are not documented because the process throughputs are considered confidential. These emission limits are included in an OAQ confidential file.

D.1.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for P-SB1 (T-32), P-SB2 (T-87), P-SILOS, PSAR1 (T-33), P-SAR2 (T-128), P-ARS1 (T-30), P-ASR2 (T-129), P-BL (E-190), and P-SD (E110) their control devices.

Compliance Determination Requirements

D.1.3 Particulate Matter (PM)

(a) In order to comply with D.1.1, each baghouse associated with a specific process shall be in operation and control emissions at all times that the specific process is in operation. The specific processes that are equipped with baghouses are:

- (1) One (1) storage bin identified as P-SB1 (T-32)
- (2) One (1) storage bin identified as P-SB2(T-87)
- (3) One (1) day bin identified as SDBE (EX-120-005A)
- (4) One (1) day bin identified as S-DBW (EX-120-005B)
- (5) One (1) bulk bag loading process identified as P-BBL with two baghouses (E-160, E-176)

- (6) One (1) bulk loading process containing one rail car loading system, identified as P-BL (E-190) and one sealand container loading system identified as P-BL (E-190)
- (7) Two (2) mixers identified as S-MIX (EX-120-007A and EX-120-007B)
- (8) Two (2) calciners identified as S-C1 (EX-300-25) and SC-2 (EX-130-005), equipped with one baghouse (EX-631-011).
- (9) One (1) pneumatic transfer process for the fines grinder system identified as S-PT (EX-104)
- (10) Bag loadout, screener, and other particulate matter processes identified as ADC #1
- (11) One (1) high temperature drier identified as SEACAP drier (EX-529)
- (b) In order to comply with D.1.1 the fabric filters for PM control shall be in operation and control the emissions from P-SILOS at all times that the silos are in operation.
- (c) In order to comply with D.1.1 the baghouse and cyclone integral to the spray dryer P-SD (E-110) shall be in operation and control emissions at all times the spray dryer is in operation. The scrubber controlling particulate matter from the spray dryer is not necessary to meet the allowable PM emission rate and does not have to be in operation at all times.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.4 Visible Emissions Notations

- (a) Visible emission notations of the exhaust from the stacks PSAR1 (T-33), P-SAR2 (T-128), P-ARS1 (T-30), P-ASR2 (T-129), and P-SD (F-110) shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

